What is claimed:

1. An optical device comprising:

a source of electromagnetic radiation;

a target to be illuminated with at least a portion of the electromagnetic radiation emitted by said source;

a first reflector having an optical axis and a first and a second focal point on said optical axis, said source being located proximate to said first focal point of said first reflector to produce rays of radiation that reflect from said first reflector and substantially converge at said second focal point; and

a second reflector having an optical axis and a first and a second focal point on said optical axis of said second reflector, said target being located proximate to said first focal point of said second reflector to receive rays of radiation that pass through said second focus of said second reflector and are reflected by said second reflector to substantially converge at said first focal point of said second reflector, said second reflector being positioned and oriented with respect to said first reflector such that said second focal point of said first reflector and said second focal point of said second reflector are positioned substantially proximate and said optical axis of said first reflector and said optical axis of said second reflector are substantially collinear.

2. The collecting and condensing system of claim 1, wherein the first reflector and the second reflector are about the same size and shape and have a corresponding size and optical orientation with respect to each other so that substantially each ray of radiation reflected by a surface portion of said first reflector is reflected by a corresponding surface portion of said second reflector toward said target so as to achieve substantially unit magnification between the source and the target.

3. The optical device of claim 1, wherein each of said first and said second reflectors comprises at least a portion of a substantial ellipsoid of revolution.

4. The optical device of claim 3, wherein each of said first and said second reflectors further comprises a non-ellipsoidal section.

5. The optical device of claim 1, wherein each of said first and said second reflectors comprises at least a portion of a substantial toroid of revolution.

6. The optical device of claim 1, wherein each of said first and said second reflectors comprises at least a portion of a substantial sphere of revolution.

7. The optical device of claim 1, wherein a portion of the electromagnetic radiation emitted by said source of electromagnetic radiation impinges directly on said first reflector and a portion of the electromagnetic radiation does not impinge directly on said first reflector and wherein said device further comprise an additional reflector constructed and arranged to reflect at least part of the portion of the electromagnetic radiation that does not impinge directly on said first reflector toward said first reflector through the first focal point of said first reflector to increase the flux intensity of the converging rays.

8. The optical device of claim 7, wherein said additional reflector comprises a spherical retro-reflector disposed on a side of said source opposite said first reflector to reflect electromagnetic radiation emitted from said source in a direction away from said first reflector toward said first reflector through the first focal point of said first reflector.

9. The optical device of claim 1, wherein said optical axes of said first and second reflectors substantially coincide with one another and wherein said first and second reflectors are arranged in an opposed, facing relation with respect to each other.

10. The optical device of claim 1 further comprising an image source illuminated by the radiation collected and condensed at said target, wherein said image source contains a stored image and said stored image is projected by the radiation.

11. The optical device of claim 1 wherein the first and the second reflectors each have diameter that is greater than a distance between the source and the target.

12. An optical device for collecting electromagnetic radiation emitted by a source of electromagnetic radiation and focusing the collected radiation onto a target, said device comprising:

a first reflector comprising at least a portion of a revolution of a concave curve, said first reflector having an optical axis and at least two focal point on said optical axis, said first reflector producing rays of radiation reflected from said first reflector that converge at a second focal points of said first reflector when a source of electromagnetic radiation is located at a first focal point of said first reflector; and

a second reflector comprising at least a portion of a revolution of a concave curve, said second reflector having an optical axis and at least two focal point on said optical axis, said second reflector being positioned and oriented with respect to said first reflector so that the optical axis of the first reflector and the optical axis of the second reflector are substantially collinear, said second reflector being positioned and oriented with respect to said first reflector so that the second focal point of the first reflector a second focal points of the second reflector are positioned substantially proximate, and the converging rays of radiation reflected from said first reflector passing through the second focal point of the first reflector and being redirected by said second reflector toward the target positioned proximate the second focal point of said second reflector.

13. The optical device of claim 12, wherein said first reflector and said second reflector have substantially the same size and shape and are oriented optically symmetrically with respect to each other so that each ray of radiation reflected by a surface portion of said first reflector is reflected by a corresponding surface portion of said reflector toward said target so as to achieve substantially unit magnification between the source and the target.

14. The optical device of claim 12, further comprising an additional reflector constructed and arranged to reflect at least part of a portion of electromagnetic radiation emitted by the source that does not impinge directly on said first reflector toward said first reflector through the first focal point of said first reflector to increase the flux intensity of the converging rays.

15. A method for collecting electromagnetic radiation emitted by a source of electromagnetic radiation and focusing the collected radiation onto a target, said method comprising the steps of:

positioning said source of electromagnetic radiation at a first focal point of a first ellipsoidal reflector so that said first reflector produces rays of radiation reflected from said first reflector that converge at a second focal points of said first reflector;

positioning a second ellipsoidal reflector so that a first focal point of the second ellipsoidal reflector is substantially proximate with the second focal point of the first ellipsoidal reflector, whereby the converging rays of radiation reflected from said first reflector pass through the first focal point of the first reflector and are redirected by said second reflector toward a second focal point of said second reflector; and

positioning the target proximate to the second focal point of said second reflector;

16. The method of claim 15 further comprising the step of orientating the first reflector and the second reflectors so that an optical axis of the first reflector and an optical axis of the second reflector substantially coincide.